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MILO S. BAKER (1868–1961)

On January 4, 1961, the career of Milo S. Baker came to an end in his 92nd year. His was a role that closes the second dynasty of California botanists, namely those botanists who were direct career descendants of the colorful pioneers, many of whom he knew personally. His career as a plant collector of the California flora opened with the close of the last century and continued well over half of the current century, for he was very active to the end.

Born in Strawberry Point in Iowa on July 19, 1868, he came to California with his parents in 1875 to settle in Oak Run, Tehama County. At the age of twelve he was taken to San Jose, where he completed high school and entered what was then San Jose Normal School. At the end of one year he was admitted by examination to the teaching profession in the public schools of Santa Clara County. In 1887 he went to Modoc County to teach in the elementary schools. To reach his school, he walked from Redding to Bieber, a distance of almost 100 miles. He collected plants in this general area, and corresponded about them with Pro-

fessor E. L. Greene of the University of California. Much of the flora of eastern Shasta and Lassen counties was first made known through his work. Noteworthy is *Cupressus Bakeri,* discovered by him in the lava beds and named in his honor by Professor Willis Linn Jepson in the first volume of the Flora of California. In 1894, Milo Baker and F. P. Nutting, a like-minded field botanist, spent six weeks collecting together in Lassen and Modoc counties. Their collections were widely distributed in herbaria. At the close of the century he came to the University of California, where he majored in chemistry and took courses in botany. On completion of his work he taught at Lowell High School in San Francisco from 1901 to 1906. Somewhere in his travels he contracted malaria and decided to leave the teaching profession in the interests of his health. He purchased a ranch in Kenwood, Sonoma County, which he named "The Maples," a name which appears on some of his collections; it is situated at the entrance of Adobe Canyon, where Sonoma Creek enters Sonoma Valley. I suspect he was led to this particular ranch because of its botanical assets rather than its agricultural promise. Its rocks are of basalt, Sonoma tuff, and serpentine, and they selected their flora accordingly. His career as a rancher was not a great success, and it is not surprising that in 1922 he began teaching in Santa Rosa High School and later in Santa Rosa Junior College, where he had a distinguished career. Few high school or junior college teachers of botany have inspired so many students to follow plant science in some form as a career. Few teachers have aroused a greater interest in botany among the laymen of their community. Under his generalship, the annual wild flower shows in Sonoma County attracted the attention of all of central California. They were outstanding in their representation of the flora as well as in the inspired participation of the community in making them a success. As a result Santa Rosa is outstanding in its botanically informed populace.

His research interests were twofold. First and foremost was the genus *Viola,* upon which he published several dissertations and which he studied through a living collection at his home. Second was his interest in the flora of the North Coast Ranges of California. He published an annotated list of the plants of this area in mimeograph form and kept it up-to-date in several editions.

Baker was a man whose scientific ambition was always afire. Although a robust man, in his later years his ambition far exceeded his physical capacity. He literally refused to accept old age and at the age of 91 he spoke frequently of his plan to collect violets on Mt. McKinley in Alaska and sought companions to accompany him. He was not easily dissuaded.

He built an excellent herbarium of the North Coast Range counties. It is now fittingly housed at Santa Rosa Junior College and stands as a monument to his inspired teaching. His collection of violets is now housed at the University of California at Berkeley and is a marvelous research collection of this group of plants.

A photograph of Milo S. Baker and a dedication to him form the frontispiece of Volume XIII of Madroño.

I wish to express my appreciation to Mrs. Avis Stopple, Librarian at Santa Rosa Junior College, for assistance in the preparation of the annotated bibliography which follows—Herbert L. Mason, Department of Botany, University of California, Berkeley.

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CYTOLOGICAL OBSERVATIONS ON ADIANTUM × TRACYI C. C. HALL[1]

Warren H. Wagner, Jr.

The California maidenhair fern, *Adiantum jordanii* C. Muell. (syn. *A. emarginatum* D. C. Eaton) is one of the endemic pteridophytes of the California Floral Province (Howell 1960). In the North Coast Ranges where it comes into association with the wide-ranging *A. pedatum* L., there has occasionally been found an intermediate plant, *A.* × *tracyi* C. C. Hall, which combines the characteristics of these sharply different species (Wagner 1956). A single plant of the intermediate fern was discovered as early as 1895 along the Eel River near Pepperwood, Humboldt County, by Mr. J. P. Tracy, and the observations to be recorded here are based on a propagated descendant of that plant. Other naturally occurring specimens of *A.* × *tracyi* have been found in Sonoma and Marin counties. Easily propagated from rhizomes, this fern has proved a decorative and hardy garden plant.

Adiantum × *tracyi* has been interpreted as an interspecific hybrid because of its morphological intermediacy in a number of obvious features; its sporadic distribution, and occurrence where the putative parents grow nearby; and the irregularity of its spores (Wagner, *ibid.*). The facts to be reported below tend to supply additional evidence for considering that this fern is a natural hybrid. To obtain cytological observations, the immature sori of *Adiantum* × *tracyi* were fixed in Newcomer's Fixing Fluid (Newcomer, 1953). Collections were made in May, June, and July 1960 from plants growing at the University of Michigan Botanical Gardens.

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